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DATE MAILED: 01/23/2003

✓ APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/888,652	06/26/2001	Doo Hyun Ko	8733.476.00	9120	
30827 7	590 01/23/2003				
MCKENNA LONG & ALDRIDGE LLP			EXAMINER		
1900 K STREI WASHINGTO	ET, NW N, DC 20006		CHOWDHURY, TARIFUR RASHID		
			ART UNIT	PAPER NUMBER	
			2871		

Please find below and/or attached an Office communication concerning this application or proceeding.

						W			
			Applica	ation No.	Applicant(s)				
			09/888	,652	KO ET AL.				
Office Action Summary			Examin	ner	Art Unit				
			Tarifur I	R Chowdhury	2871				
Perio		The MAILING DATE of this communion Reply	cation appears on t	the cover sheet wi	th the correspondence add	ress			
- - - -	Exter after If the If NC Failu Any re	ORTENED STATUTORY PERIOD FOMAILING DATE OF THIS COMMUNIC nsions of time may be available under the provisions of SIX (6) MONTHS from the mailing date of this communication of the reply specified above is less than thirty (30 period for reply is specified above, the maximum state to reply within the set or extended period for reply very received by the Office later than three months afted patent term adjustment. See 37 CFR 1.704(b).	CATION. of 37 CFR 1.136(a). In no unication. of days, a reply within the stutory period will apply and will, by statute, cause the a	event, however, may a restatutory minimum of thirtd will expire SIX (6) MON application to become AB	eply be timely filed y (30) days will be considered timely. THS from the mailing date of this con ANDONED (35 U.S.C. § 133).	nmunication.			
1)⊠	Responsive to communication(s) file	ed on <u>26 June 200</u>	<u>1</u> .					
2a)	This action is FINAL .	2b)⊠ This action	is non-final.					
)□ ositi	Since this application is in condition closed in accordance with the practi on of Claims				merits is			
4)	Claim(s) 1-26 is/are pending in the a	pplication.						
		4a) Of the above claim(s) is/ard	e withdrawn from o	consideration.					
5)⊠	Claim(s) 7-13 and 22-26 is/are allowed	ed.						
6)⊠	⊠ Claim(s) <u>1,3-6,14-18 and 21</u> is/are rejected.							
7)⊠	☑ Claim(s) <u>2,19 and 20</u> is/are objected to.							
8)	Claim(s) are subject to restrict	ion and/or election	requirement.					
Appl	icati	on Papers							
, 9) <u> </u>	The specification is objected to by the	Examiner.						
10) ×	The drawing(s) filed on <u>26 June 2001</u>	is/are: a)□ accept	ed or b) Objected	to by the Examiner.				
	_	Applicant may not request that any obje							
11)□ .	The proposed drawing correction filed			isapproved by the Examiner	•			
		If approved, corrected drawings are req	· -	Office action.					
		The oath or declaration is objected to	by the Examiner.						
Prior	ity u	inder 35 U.S.C. §§ 119 and 120							
13)		Acknowledgment is made of a claim f	for foreign priority	under 35 U.S.C. §	§ 119(a)-(d) or (f).				
	a)[⊠ All b) ☐ Some * c) ☐ None of:							
	1. Certified copies of the priority documents have been received.								
	2. Certified copies of the priority documents have been received in Application No								
	* S	 Copies of the certified copies o application from the Internatee the attached detailed Office action 	ational Bureau (PC	T Rule 17.2(a)).		tage			
14)		cknowledgment is made of a claim fo	r domestic priority	under 35 U.S.C.	§ 119(e) (to a provisional a	application).			
15)) The translation of the foreign lang Acknowledgment is made of a claim fo		• •					
Attach	men	t(s)	•						
2) 🔲	Notic	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PT nation Disclosure Statement(s) (PTO-1449) Pa			Summary (PTO-413) Paper No(s) informal Patent Application (PTO-				

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DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

- 3. Claims 1, 3-6, 14-18 and 21 are rejected under 35 U.S.C. 102(e) as being anticipated by Kim et al., (Kim), US 2001/0019388.
- 4. Kim discloses and shows in Fig. 4A and 6A, a multi-domain liquid crystal display device, comprising:
 - first and second substrates (33, 31);
 - a pixel electrode (13) formed on the second substrate (31);
 - a first side electrode (15) formed along a periphery of the pixel electrode (13);
 - a second side electrode (25) formed diagonally on the pixel electrode (13) (Fig. 6A); and
 - first and second dielectric frames (53) formed on the first substrate (33).

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Accordingly, claim 1 is anticipated.

As to claim 3, Kim shows in Fig. 4A that an insulating film (35)formed on the first and second side electrodes, the pixel electrode (13) being formed on the insulating film (35).

As to claim 4, Kim shows in Fig. 4A that the first and second dielectric frames (53) are formed on the first substrate (33) to correspond to sides of the second side electrode (25).

As to claim 5, Kim also shows in Fig. 6A that the first and second dielectric frames (53) are formed in the same direction as the second side electrode (25);

As to claim 6, Fig. 4A of Kim also shows that the pixel electrode (13) has open regions above the second side electrode (25).

As to claim 14, Kim also discloses that the multi-domain liquid crystal display also comprising:

- data lines on the first substrate;
- gate lines on the first substrate and perpendicular the data lines, the data and gate lines defining a pixel region having at least two liquid crystal domains in the pixel region.

As to claim 15, Kim shows in Fig. 6A that the pixel electrode (13) has slits (53) in a region corresponding to the second side electrode (25).

As to claim 16, Kim also shows in Fig. 6A and discloses that the first side electrode (15) includes parallel first side electrodes that are parallel to the data lines and

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transverse first side electrodes that cross the pixel region and are perpendicular to the data lines.

As to claim 17, Kim also shows in Fig. 6A that the parallel first side electrodes extend from respective ones of the transverse first side electrodes to respective ones of the at least one dielectric structure (53).

As to claim 18, Kim shows in Fig. 6A that the second side electrode (25) transverses the pixel electrode (13) diagonally.

As to claim 21, Kim shows in Fig. 6A that the first side electrode (15) partially surrounds the pixel electrode (13).

Allowable Subject Matter

- 5. Claims 7-13 and 22-26 are allowed.
- 6. Claims 2, 19 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 7. The following is a statement of reasons for the indication of allowable subject matter:

The prior arts of record do not anticipate nor render obvious to one ordinary skilled in the art a multi-domain liquid crystal display comprising various elements as claimed, more specifically the first side electrode being electrically connected to the second side electrode.

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US 2001/0019388 discloses a multi-domain liquid crystal display device wherein the first side electrode and the second side electrode are not electrically connected.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tarifur R Chowdhury whose telephone number is (703) 308-4115. The examiner can normally be reached on M-Th (6:30-5:00) Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William L Sikes can be reached on (703) 305-4842. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7005 for regular communications and (703) 308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

T. Chowdhury

Patent Examiner

Technology Center 2800

TRC January 15, 2003